

GMT
3. AIDS/HIV AWARENESS

Lesson Topic: AIDS/HIV Awareness

Instructional Material:

Instructional Reference:

1. Facts About AIDS, Public Health Service/U.S. Department of Health and Human Services.

Instructional Aids:

1. Visual Aid Panel
2. Audiovisual Equipment

Terminal Objective:

1. The student will be informed in the general military subjects to enable him/her to function effectively in the military environment and to reinforce the concepts of good order and discipline acquired in previous training.

Enabling Objective:

1. The student will be informed of the effects of AIDS.
2. The student will be informed of the ways to prevent AIDS.
3. The student will be informed of HIV/AIDS transmission and lack of transmission via intimate/casual contact.
4. The student will learn how the Navy tests personnel for AIDS.

I. DEFINITION OF TERMS

- A. Virus: Sub-microscopic disease able to reproduce itself only inside a cell.
- B. HIV (Human Immunodeficiency Virus): All AIDS patients have antibodies that respond to HIV.
- C. AIDS (Acquired Immune Deficiency Syndrome)
 - 1. A set of diseases normally identified as a group.
 - 2. All AIDS patients have antibodies that respond to HIV.
 - 3. The most virulent outcome of infection with HIV.
- D. Antibodies: Proteins in the blood that react to foreign proteins that enter the bloodstream. They neutralize to produce immunity against micro-organisms (small entities) of their poisons.
- E. Immune System: Blood cells "eat" germs, bacteria, viruses and protect body.

II. TRANSMISSION

- A. Passed through intimate sexual contact.
 - 1. Like other sexually transmitted diseases.
 - 2. More multiple partners, greater chance to get it - same/opposite sex.
 - 3. Rectal.
 - 4. Oral/genital (also eyes, mouth, nose).
 - 5. Vaginal.
- B. Through transfusion of infected blood, blood products or organs of people infected with AIDS. AIDS patients cannot donate organs, blood, tissue or sperm.
- C. By sharing dirty needles.
 - 1. Intravenous drug users, "shooting drugs", tattoo needles, etc.
 - 2. Usually significant amount of blood present in 1/3 of all cases.
- D. Prenatal

1. Before birth, one to four weeks after utero (in uterus) from mother to baby.
2. The fetus moves down the birth canal and is infected through blood exchange of fetus and mother.

E. Not casual transmission:

1. Problem with people rejecting AIDS patients. AIDS patients lose jobs, friends. People do not understand illness.
2. Small amount of virus in tears, saliva, urine and breast milk; need large amount to infect.
3. Must use rubber gloves and disinfect when handling secretions. Wear mask to protect eyes.
4. Not transmitted through:
 - a. Biting.
 - b. Food handling.
 - c. Insect bites.
 - d. Razors.
 - e. Eating utensils, dishes.
 - f. Toilet seats.

III. WHAT HAPPENS

A. Infection only takes a few minutes, it lasts a lifetime. The virus is spread from person-to-person by direct sexual contact or through the bloodstream.

1. HIV is found mainly in the blood, semen and vaginal secretions.
2. Finding the virus in your blood does not mean that you are infected; instead you are a carrier.
3. Family members of AIDS patients, except sex partners, do not necessarily become "Sero Positive" (blood positive) infected with HIV.

B. Long incubation period (5 to 10 years)

1. No symptoms, infected person appears well but can infect others.

- a. One should take tests for AIDS before starting a sexual relationship.
- b. If the body is weakened, other illnesses, it is more vulnerable to infection.
- 2. If the patient has another sexually transmitted disease, he/she stands a greater chance of being infected.
- 3. If the patient has hepatitis, there is a greater chance of infection.

C. Can get one of three syndromes.

1. ARC (AIDS Related Complex)

- a. This is less serious than AIDS.

- b. Symptoms:

- (1) Loss of appetite.
- (2) Loss of weight.
- (3) Fever.
- (4) Night sweats.
- (5) Skin rashes.
- (6) Diarrhea.
- (7) Tiredness.
- (8) Swollen lymph nodes.
- (9) HL (Hairy Leukoplasia).

2. "Opportunistic Disease" - Due to lower resistance, 25% develop these:

- a. Pneumonia (Pneumocystic Carinii)
- b. Tuberculosis
- c. Cancer (Kaposi's Sarcoma)
- d. Nerve

3. AIDS/HIV

- a. Destroys immune system.
- b. Fatal.
- c. Exhibits ARC or Opportunistic symptoms.
- d. No vaccine at this time. AZT only approved drug (NOV. 87).
 - (1) "AZT" (Azidothymidine) - temporarily suppresses the virus, but does not cure.
 - (2) Must be taken every four hours around-the-clock for the rest of the patient's life.
 - (3) Causes severe bone marrow damage and anemia.
 - (4) 1/2 of patients must receive weekly/biweekly transfusions.
 - (5) Approved by the Food and Drug Administration.
 - (6) Costs \$10,000 per year.

4. What determines whether you get AIDS

- a. Some people are more susceptible than others.
 - (1) Genetic makeup.
 - (2) General health (diet, rest, exercise).
- b. Reduction of stress. Nervous people suffer from more physical illnesses than others and have a greater tendency toward disease and lowered resistance.
- c. Presence of other sexually transmitted diseases: gonorrhea, herpes, syphilis, etc.
- d. Types of sexual contact:
 - (1) Anal intercourse
 - (a) Greatest risk.
 - (b) Recipient having greater risk than the donor:
 - 1. Recipient is usually torn or traumatized during the act.

2. Transmission of the disease is through the bloodstream.

(2) Vaginal intercourse

- (a) Next greatest risk.
- (b) Any break in skin or tissue which occurs during sexual relations opens door to infection.
- (c) The area is engorged with blood during sexual activity.

(3) Oral sex

- (a) The next most greatest risk.
- (b) Mouth can have minute tears near gums from brushing, unnoticed by the recipient. Open to infection.
- (c) Mouth parts may have sores or open cuts recipient is unaware of.

(4) Donor in intercourse

- (a) Penis may have some trauma or minute abrasion not noticed or felt.
- (b) Penis is engorged with blood during sexual activity. Susceptible by its sensitivity.

IV. AIDS HAS REACHED EPIDEMIC PROPORTIONS

A. Mennonite Central Committee Study:

1. Heterosexual infection is growing rapidly.
2. Prostitutes infected are not removed from the streets!
3. Military, the primary clients, are at the greatest risk.

B. World Health Organization

1. Epidemic spread to 100 countries, 5-10 million.
2. Estimate 100 million victims within the next 10 years.
3. In Africa, 90 percent of prostitutes are infected in Mombase, Kenya (2/87), and are not

removed from the streets.

4. In Uganda it is the primary cause of death (it outstrips malaria).

5. In Africa, 2-5 million or 15-25 percent of the entire adult population is infected.

6. An estimated 25 percent of the entire African population will die of AIDS.

7. In thirty countries studied, individuals averaged 32 sexual partners (Time, 4/87).

C. In the United States prostitution is illegal and impossible to monitor.

1. In New York and Miami, 40 percent of the prostitutes are infected and are not removed from the streets.

2. In San Francisco there are 90,000 bisexuals/homosexuals, and of these 50-70 percent are infected. (Feb 87)

a. Feb 1987: 60 percent of all AIDS victims were homosexual. Drop in percentage means that other groups are infected now.

b. May 1987: 60 percent of all AIDS victims are bisexual.

c. May 1987: Virus slows down among homosexuals. From 12% a year in 1980-82 to 1% a year in 1987.

3. Throughout the United States

a. 10 APR 1987: Estimated two million persons affected, 43,500 reported as of 31 Oct 1987 for full blown AIDS. Estimated: 100,000-200,000 ARC; 270,000 in 5 years; 179,000 will die from AIDS.

b. By May 1987, 60 percent of the infected have progressed to AIDS/HIV/ARC within seven years.

c. APR 1987:

(1) 25 percent drug related.

(2) 8 percent homosexuals.

(3) 7 percent hemophiliacs.

(4) Life expectancy: 5 years average, most are inner-city and poor.

(5) All races are involved.

(6) Economic threat to the U.S.

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|----------------------|-----------------|
| (a) Cost of caring | 8.0 billion/yr |
| (b) Cost of research | 2.3 billion/yr |
| (c) Cost of wages | 55.3 billion/yr |

(7) By 1991, estimated medical cost = \$14 billion/yr. Time, Health Economist
Anne Scilowsky, Palo Alto Medical Research Foundation.

d. Big jump in 5 months:

- (1) DEC 1986: 3.8 percent heterosexual.
- (2) APR 1987: 8 percent heterosexual.
- (3) Women with AIDS up by 10 percent (31 Oct. 1987).
- (4) Estimated everyone will know a victim of AIDS by 1991.

V. TESTING MILITARY PERSONNEL

A. Purpose

1. Educate for avoidance.
2. Keep infected military in the United States, those that tested positive.
 - a. Can be retained.
 - b. Cannot donate blood.
 - c. Must be retested annually.
3. Uniformed services act as own blood bank during national emergencies.
Services must have clean blood.
4. Protect those who unknowingly carry the disease. Live virus vaccines can activate disease.

B. Policy SECNAVINST 5300.3 (4 DEC 1985)

1. Screen all new recruits. Positives not eligible.

2. Department of the Navy, Policy SECNAVINST 5300.3.
3. Surveillance system established in the military.
 - a. Screen all active duty and reservists.
 - b. Naval Academy, ROTC/POC/AOC.
 - c. All blood will be checked for AIDS.
 - d. 15 out of every 10,000 checked positive in the beginning, less now.
Screening results: Infected not entering.
4. Category "A": Fit for duty with geographic restriction.
 - a. Cannot go on ships, OCONUS or to deployable units (Marines can go to Hawaii or Alaska).
 - b. Will generally get assignment to same billet.
 - c. If you were tested at CONUS shore command, you will be returned to the same unit; otherwise to TPU or casual company.
 - d. Can re-enlist, apply for schools, get promoted, etc. Basic assumption is that Category "A" will stay in and continue their careers.
 - e. Some problem areas, for example quartermaster billets.
 - f. Anticipate geographic restrictions will be lifted in a year or two when we know more.
5. Categories "B" and "C": Medical board = CPEB = TDRL.
 - a. TDRL = Medical Retirement with annual re-evaluation.
 - b. If back at Category "A", option: return to duty or get out.
 - c. If still in Category "B" or "C", after five years, permanent medical retirement.
 - d. Rule of Thumb: Get all the regular retirements plus Category "B" (50% base pay, tax free) and Category "C" (75% of base pay, tax free).

VI. PREVENTION

- A. Only effective way is no sex, no drugs.

B. Avoid multiple partners (male/female), and prostitutes.

C. Know your partner, faithfulness for at least five years both partners.

1. Past sex partners may have infected you or you them.
2. You have an obligation to notify sex partners, as many as applicable, and recommend they be tested.

D. If you have sex:

1. Use condoms, contraceptive foams or gels with nonoxynol 9.
2. Condoms are 83 percent effective!
 - a. Use from start to finish.
 - b. AIDS, pregnancy and sexually transmitted diseases can result from one act.
3. Beware of tears in rectum, vagina, penis or mouth (you may not feel it or be aware of it).

E. Numbers if you suspect you are infected:

1. Hotline : 1-800-342-AIDS, Center of Disease Control, Atlanta, Georgia.

F. No illegal intravenous drugs, tattooing or use of unclean syringes.

G. Be sure transfused blood is screened.

1. Before March 1985, donated blood was not checked for AIDS.
2. If you expect you will need an operation or blood, bank your own blood ahead of time.
3. 7 percent of hemophiliacs have AIDS.

H. If pregnant see doctor.

1. If mother has AIDS, 1/3 of fetuses will die and all babies will be born with it.

I. You cannot get AIDS by:

1. Shaking hands.
2. Social kissing, except "French kissing".

3. Crying, coughing or sneezing.
4. Swimming in pools, or bathing in hot tubs.
5. Sharing bed linens/towels. Cleanliness: use 1 part household bleach to 10 parts water.
6. Sharing cups, straws, dishes, etc. May not be sanitary for other reasons.
7. Eating in restaurants.
8. Using public toilets, door knobs or telephones.
9. Using public office machinery.
10. Using household furniture used by AIDS patients.
11. Having body massages.
12. Donating blood.
13. Visiting doctor or dentist.
14. Visiting beautician or barber with AIDS.
15. Visiting AIDS patients.
16. Being bitten by insects or pets.
17. Touching saliva, tears or mucous of AIDS patients.
 - a. Health care people who became infected with AIDS' patients' blood had skin infections, and did not wear protection (rubber gloves, mask, goggles, smock).
 - b. Material that is grossly or obviously contaminated with blood, feces or vomit should be wiped up with gloves and soap and water, plastic bagged, tied shut, and thrown in garbage containers, then disinfected with 1:10 household bleach.

VII. REVIEW

- A. Instructor should ask the students if they have any questions. Questions should also be allowed during the lecture to clarify any misunderstandings.
- B. If the students do not have any questions, the instructor shall ask the students questions to ensure the lesson was understood.